

3/8" BLACK NICKEL

AIR IMPACT WRENCH

OWNER'S MANUAL



Read carefully and understand all INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

ltem # 120209

Thank you very much for choosing a NORTHERN TOOL + EQUIPMENT CO., INC. Product! For future reference, please complete the owner's record below:

Model: _____ Purchase Date: ___

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This machine is designed for certain applications only. Northern Tool + Equipment cannot be responsible for issues arising from modification. We strongly recommend this machine is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted Northern Tool + Equipment to determine if it can or should be performed on the product.

For technical questions please call 1-800-222-5381.

Technical Specifications

ltem	Description		
Square Drive	3/8"		
Free Speed	13,000 RPM		
Max. Torque	85 ftlbs.		
Air Consumption	5.5 CFM		
Air Inlet Diameter	1/4"- 18NPT		
Min. Hose Size	3/8"		
Max. air pressure	90 PSI		

WARNING: Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your pneumatic tool.

WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SAVE THESE INSTRUCTIONS

WORK AREA

Keep work area clean, free of clutter and well lit. Cluttered and dark work areas can cause accidents.

Do not use your tool where there is a risk of causing a fire or an explosion; e.g. in the presence of flammable liquids, gasses, or dust. Power tools create sparks, which may ignite the dust or fumes. Do not expose air tools to rain or wet conditions.

Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control, so visitors should remain at a safe distance from the work area.

Be aware of all power lines, electrical circuits, water pipes and other mechanical hazards in your work area, particularly those hazards below the work surface hidden from the operator's view that may be unintentionally contacted and may cause personal harm or property damage.

Be alert of your surroundings. Using power tools in confined work areas may put you dangerously close to cutting tools and rotating parts.

PERSONAL SAFETY

Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

Dress properly. Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts. Air vents often cover moving parts and should be avoided.

Use safety apparel and equipment. Use safety goggles or safety glasses with side shields which comply with current national standards, or when needed, a face shield. Use as dust mask in dusty work conditions. This applies to all persons in the work area. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate.

Avoid accidental starting. Do not carry the power tool with your finger on the switch. Ensure the switch is in the off position before plugging tool into power outlet. In the event of a power failure, while a tool is being used, turn the switch off to prevent surprise starting when power is restored.

Do not overreach. Keep proper footing and balance at all times.

Remove adjusting keys or wrenches before connecting to the power supply or turning on the tool. A wrench or key that is left attached to a rotating part of the tool may result in personal injury.

PNEUMATIC TOOL USE

Do not force the tool. Tools do a better and safer job when used in the manner for which they are designed. Plan your work, and use the correct tool for the job.

Never use a tool with a malfunctioning switch. Any power tool that cannot be controlled with the switch is dangerous and must be repaired by an authorized service representative before using. **Check for misalignment** or binding of moving parts, breakages of parts, damaged air hose (not included), and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

Disconnect air supply from tool and place the switch in the locked or off position before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

Secure work with clamps or a vise instead of your hand to hold work when practical. This safety precaution allows for proper tool operation using both hands.

Store idle tools. When tools are not is use, store them in a dry, secure place out of the reach of children. Inspect tools for good working condition prior to storage and before re-use.

Use only accessories that are recommended by the manufacturer for your model.

Accessories that may be suitable for one tool may create a risk of injury when used on another tool.

Keep guards in place and in working order.

Never leave tool running unattended.

Compressed air only. Only use clean, dry and regulated compressed air at no more than 90 PSI to power this tool. Never use oxygen, carbon dioxide or any other bottled gas as a power source for this tool.

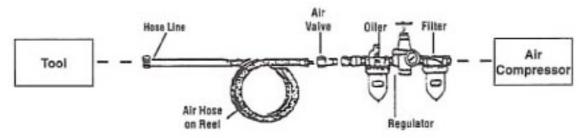
Use proper size and type air pressure line and fittings. The recommended air line for this tool is 3/8" delivering no more than 90 PSI. Recommended air inlet size is 1/4"- 18NPT.

Use air hoses rated for safe operation of the tool. Air hoses rated for a maximum of 150 PSI or greater must be used with this tool.

Make sure the hose is free of obstructions or snags. Entangled hoses can cause loss of balance or footing.

ASSEMBLY

Figure 1. Optimal pneumatic set-up.



Recommended Air Line Components

NOTE: For best performance, it is recommended to incorporate an inline filter, regulator, and oiler similar to the set-up seen in Figure 1. Everything needed for the perfect set-up can be found at Northern Tool + Equipment.

- 1. You will need to attach a standard 1/4" air connector (not included) to the air inlet (29) of the tool. First wrap the threaded portion of the 1/4" air coupler with pipe thread tape. Then thread the air coupler into the air inlet (29), and tighten securely.
- 2. Turn on the air compressor, set the air pressure regulator of the compressor to 90 PSI, and connect the 3/8" air compressor hose to the air connector on air impact wrench with a quick connect coupler (not included).

WARNING: Do not connect pneumatic tool to compressed air in which the pressure exceeds 90 PSI. Damage to your tool and possible personal injury may result.

NOTE: If you are not using an automatic oiler system, before operation, add a few drops of pneumatic tool oil to the airline connection. Add a few more drops after each hour of continual use.

- 3. Check the air line and its connections for air leaks, and repair them before using this tool.
- 4. Turn off the compressor and disconnect the air source hose in preparation to attach the sockets into the impact wrench.

OPERATING INSTRUCTION

WARNING: Always disconnect from the air source before examining or changing sockets.

- 1. Select the appropriate size 3/8" drive socket, and attach the socket onto the wrench's anvil.
- 2. Turn the air regulator (32) in the direction indicated by the "H" arrow on the regulator to increase the power. Turn it toward the "L" arrow to decrease the power.

- 3. Set the forward/reverse lever to the left, so that the anvil turns clockwise (forward).
- 4. Turn on the air compressor, confirm the compressor's pressure regulator is set to 90 PSI, and connect the compressor hose to the air ratchet wrench at the air inlet (29).
- 5. Place the socket (not included) over the nut you wish to tighten.
- 6. Grip the impact wrench firmly with two hands and gently squeeze the trigger.
- 7. When the nut is tightened, release the trigger. Turn off the air compressor and disconnect the hose.
- 8. If necessary, check the recommended torque specification for the nut and use a manual torque wrench to achieve the proper setting.

WARNING: If the impact wrench cannot tighten, or loosen, the nut to your satisfaction, do not raise the air pressure on the compressor over 90 PSI. Pressures above 90 PSI will strip the workpiece and damage the tool, potentially causing the tool to fail, causing serious injury. Use other appropriate methods and tools to tighten the nut.

Loosening

- 9. Set the forward/reverse ever to the right, so that the anvil turns counterclockwise (reverse).
- 10. Place the socket (not included) over the nut you wish to loosen.
- 11. Grip the impact wrench firmly with two hands and gently squeeze the trigger.
- 12. When the nut is loosened, release the trigger. Turn off the air compressor and disconnect the hose.

MAINTENANCE

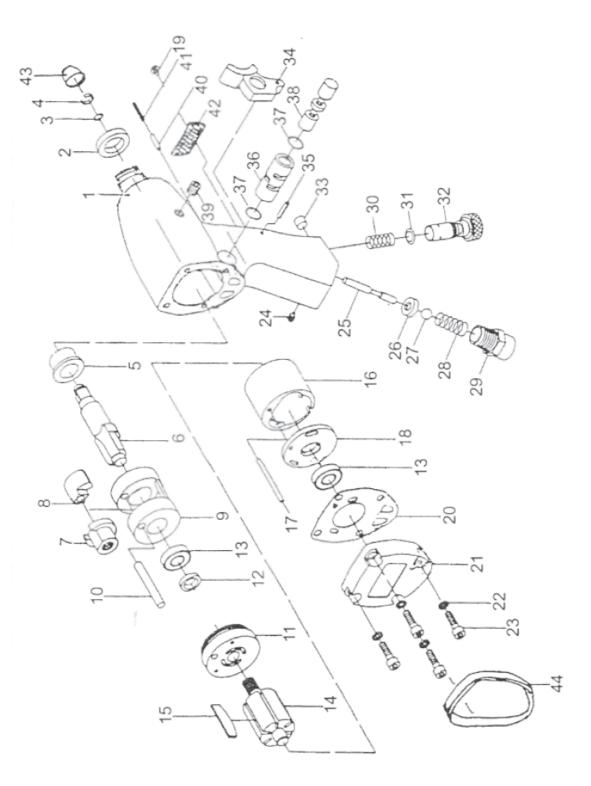
WARNING: Make sure this tool is disconnected from its air source and squeeze the trigger to release all compressed air in the tool before attempting any maintenance, cleaning, or inspection.

Maintain your tools. It is recommended that the general condition of any tool be examined before each use. Keep your tools in good repair by adopting a program of conscientious repair and maintenance in accordance with the recommended procedures found in this manual. If any abnormal vibrations or noise occurs, turn the tool off immediately and have the problem corrected before further use. Have necessary repairs made by qualified service personnel.

Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control. Keep handles dry, clean, and free from oil and grease.

Cleaning. Use a clean cloth to remove all dirt, oil, and grease from the tool after each use. If necessary, you may use a mild detergent. Do not use solvents, as damage to the tool may occur. Do not immerse the tool in any liquids.

EXPLODED DIAGRAM



PARTS LIST

Part No.	Description	Qty.	Part No.	Description	Qty.
1	Motor	1	23	Cap Washer	4
2	Oil Seal	1	24	Screw	1
3	O-ring	1	25	Valve Pin	1
4	Socket Retainer	1	26	O-ring	1
5	Spindle Bush	1	27	Steel Ball	1
6	Anvil Shank	1	28	Spring	1
7	Driver Cam	1	29	Air Inlet	1
8	Hammer Dog	1	30	Spring	1
9	Hammer Cage	1	31	O-ring	1
10	Hammer Pin	1	32	Air Regulator	1
11	Front End Plate	1	33	Pin	1
12	Oil Seal	1	34	Trigger	1
13	Ball Bearing	1	35	Pin	1
14	Rotor	1	36	Forward/Reverse Lever	1
15	Rotor Blade	6	37	O-ring	2
16	Cylinder	1	38	Reverse Valve	1
17	Dower Pin	1	39	Screw	1
18	Rotor End	1	40	Pin	1
19	Hammer Cage	1	41	Spring	1
20	Screw	1	42	Deflector	1
21	Housing Cap	1	43	Rubber Nose Guard	1
22	Washer	4	44	Rubber Cover	1

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.



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